REPORT OF USEPA
RISK MANAGEMENT PROGRAM (RMP)
INSPECTION
of
Syracuse Acetylene Plant
(now Airgas East)
Syracuse, NY

Date of Inspection: July 29, 2010

Attachment 1

Syracuse Acetylene Plant
(now Airgas East)
Syracuse, NY

List of Participants:
USEPA RMP Compliance Inspection –
Syracuse Acetylene Plant
(now Airgas East)
July 29, 2010

EPA RMP Audit July 29, 2010

Purpose: Audit of RMP at Airgas East, Inc. 121 Boxwood Lane Syracuse NY 13206

Attendance

Name	Title	Affiliation	Email	Phone
David Bill *	Safety Director	Airgas East	david.bill@airgas.com	607-481-0640
Charles Dail	Safety Director	Airgas East	charles.dail@airgas.com	240-417-0610
Tom Andrews	Safety Director	Airgas East	tom.andrews@airgas.com	603-372-2724
Tom Andersen	Environmental &Regulatory Affairs Manager	Airgas Inc.	tom.andersen@airgas.com	610-256-9529 315-463-1488
Mike Metrick	Asst Manager	Airgas East	mike.metrick@airgas.com	~~413-781-6550~~ TA
Roy Yamaguchi	Plant Manager	Airgas East	roy.yamaguchi@airgas.com	315-463-1488
Francesco Maimone	Asst Enforcement Coordinator	EPA Region 2	maimone.francesco.epa.gov	917-675-1297
Neil Mulvey	~~Principal~~	NPM Mulvey	npmulvey@optonline.net	732-598-7235
David Bill				
Charles Dail				
Tom Andrews				
Tom Andersen				
Mike Metrick				
Roy Yamaguchi				
Francesco Maimone				
Neil Mulvey				

* RMP LEAD

Attachment 2

Syracuse Acetylene Plant
(now Airgas East)
Syracuse, NY

Table of Contents:
Acetylene Plant Manual & PSI Library Manual

3 Pgs (TOC)

1 Airgas Safecor Bulletin #3
- Carbide Blockage

2 Airgas Safecor Bulletin #20
- Emergency Contact Policy

3 Airgas Safecor Bulletin #24
- Requalification of B and MC Cylinders

4 Airgas Safecor Bulletin #31
- Settle Pressure Log Requirements

5 Airgas Safecor Bulletin #36
- DE-Valving Cylinders

6 Airgas Safecor Bulletin #40
- Blowing Down Cylinders

7 Airgas Safecor Bulletin #45
- DEA Requirements for sale and Distribution of Anhydrous Hydrogen Chloride

8 Airgas Safecor Bulletin #47
- Transporting Leaking Cylinders

9 Airgas Safecor Bulletin #50
- Protective Clothing Policy

10 Airgas Safecor Bulletin #52
- LPG Safety Policy

11 Airgas Safecor Bulletin #57
- Flammable Gases

12 Airgas Safecor Bulletin #60
- Acetylene Cylinders

13 Airgas Safecor Bulletin #65
- Ammonia Requirements

14 Airgas Safecor Bulletin #72
- Guide to Performing A Security Vulnerability Assessment (SVA)

15 Airgas Safecor
- Work Safety Rules

Attachment 3

Syracuse Acetylene Plant
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Syracuse, NY

Process Hazard Analysis
Action Item Summary

Action items identified during the internal audit have been summarized as the "Action Item Summary" table. The Action Item Summary table is the master list of the action items. Each action item is listed once.

Priority Levels: A = High; B = Medium; C = Least

Note: The number of the action item on the Summary Table is solely for purposes of identifying the action item and is not intended to imply the order in which the action items are to be completed.

ACTION ITEM SUMMARY

#	Finding	Recommendation	Priority	Target Date	Responsibility	Completion Date	Initials	Corrective Action/Comment
Node 1: Carbide Loading								
5	Operator visually checks cylinders as they are received in	Conduct Training.	B		Bill Gire	5/26/10		
	Ensure PMs have been added to the maintenance program for the following recommendations	Added to PM program for 15,17,18,23,25,26,29,37,38,40,55,56,57,40,41,92,93,94,97,98,100,102,103,104,105,110,115,116,117,119,123,122,133,134,137,138,147,149,150 and 157.	B		Paul O. Don G.	7/09/10		
28	Start up should include checking water flow.	Conduct training	B		Bill Gire	5/26/10		
Node 3: Generator - Parameter: Pressure								
32	Reference emergency shut down procedures	Conduct training.	B		Bill Gire	5/26/10		
44	Daily Checks							
Node 3: Generator - Parameter: Level of CAI2/H2O								
52	Procedures to indicate requirement to shut off inlet water valve and instrument air systems at end of	Conduct training			Bill Gire	5/26/10		

	day.							
Node 3: Generator - Parameter: Containment								
67	Ensure that daily explosion meter checks are being performed.	Conduct Training.	B		Bill Gire	5/26/10		
Node 3: Generator - Parameter: Start-Up								
38	Procedures to be reviewed to include proper inerting sequence	Conduct Training.	B		Bill Gire	5/26/10		
Node 4: Flash Arrestor- Parameter: Pressure								
43	Evaluate safety relief system on back to ensure adequate flow and pressure protection (Redundant safeties immediately downstream of regulator)	Annual Calibration See EZ Maintenance			Don G.	3Q 2010		
Node 5: Piping Outlet of Flash Arrestor through Cooler Condenser - Parameter: Level of CACI/H20								
82	Procedures to indicate that operator identify water when draining.	Conduct training			Roy Y.	3Q 2010		
Node 5: Piping Outlet of Flash Arrestor through Cooler Condenser - Parameter: Shutdown								
83	Locate site specific shutdown procedure	Use Linde and JSA instructions	C		Roy Y.	3Q 2010		
Node 5: Piping Outlet of Flash Arrestor through Cooler Condenser - Parameter: Containment								
84	Assure there are procedures to indicate that all leaks detected by gas meters, by odor or through bubbles in water be investigated	Conduct training	B		Bill Gire	5/26/10		
Node 5: Piping Outlet of Flash Arrestor through Cooler Condenser - Parameter: Start-up								
87	Locate JSA	Review JSA	C		Roy Y.	3Q		

	procedures to specify uniform shutdown/startup procedures to address piping downstream of generator.				Mike M.	2010		
Node 7: Piping Outlet of Cooler Condenser through compressor - Parameter: Flow								
93	Locate JSA		C		Roy Y.			
Node 8: Piping Outlet of Compressor through HP drier with Chain Parameter: Containment								
122	Perform annual maintenance PM		B		Don G.	7/09/10		
Node 9: HP Driers with Calcium Chloride (2 vessels) Parameter: Level of CaCl/H2O								
132	Training program to include proper calcium chloride changeout/replacement	Conduct training.	B		Bill Gire	5/26/10		
136	Procedures to indicate blowdown frequency factoring ambient temperatures into formula	Evaluate current procedure to determine if blowdown frequency should be changed	B		Charles Dail	7/10		No change required
Node 9: HP Driers with Calcium Chloride (2 vessels) Parameter: Containment								
141	Perform annual maintenance PM	Added to EZ Maintenance	B		Don G.	3Q 2010		
Node 10: HP Acetylene Piping to Manifold Shutoff Valve Parameter: Flow								
146	Evaluate need for filters. If installed, PM program to include filter.	Add to PM program	C		Don G.	3Q 2010		
Node 10: HP Acetylene Piping to Manifold Shutoff Valve Parameter: Containment								
151	Perform annual maintenance	Added to EZ Maintenance	B		Don G.	3Q 2010		

	PM							
153	oiling HP piping once ever two years PM	Follow PM program	B		operators	7/2010		
154	Ensure daily checks are done	Conduct Training	C		Roy Y.	7/2010		
Node 11: Manifold to end of Pigtail Parameter: Containment								
163	Perform yearly maintenance PM Interlock the exhaust fan with plant operation.	Added to PM program	B		Don G.	3Q 2010		
165	oiling HP piping every two years PM.	Follow PM program	B		operators	7/2010		
167	Procedures to include shutting valves on empty stations when manifold partially loaded during fill cycle.	Conduct training.	B		Bill Gire	5/26/10		
Node 12: Acetylene Cylinder Parameter: Pressure								
169	Develop simplified charts for acetoning and residual calculation.	Chart was created, conduct training	C		Bill Gire	5/26/10		

170	Training to indicate proper acetoning and residual calculations	Conduct Training	B		Bill Gire	5/26/10		
171	Procedures to indicate individual weighing of cylinders	Conduct Training	B		Bill Gire	5/26/10		
172	Procedures to indicate weighing of cylinders at fill pressures of 290 - 335	Conduct Training.	B		Bill Gire	5/26/10		
Node 12: Acetylene Cylinder Parameter: Containment								
177	Ensure procedures and training are in place.	Conduct Training.	B		Bill Gire	5/26/10		
179	Ensure procedures indicate bottom head inspection and training are complete.	Conduct Training.	B		Bill Gire	5/26/10		
180	Ensure training on pressurize cylinder with nitrogen to check for plugged valve has been completed.	Conduct Training		B	Bill Gire	5/26/10		
Node 13	All findings	The Bulk Acetylene trailer was removed from service sometime in 08.		B	Roy Y.	Year 08		
Node 1 Toxic	Plant manager to ensure that worn out pallet	Conduct Training			Roy Y.	Year 09		

	straps are removed from use.							
	Plant manager to ensure there are adequate supply of pallet straps and cylinder caps.	Purchase as needed			Roy Y.	Ongoing		
	Verify last certification date for fork truck training.	Conduct fork truck training.			David B.	3Q 2010		
	Grade and add stone as necessary to back property where fork truck runs.	Add as needed			Roy Y.	Year 08,09, 10		
Node 2	Add a work safety rule for entering the storage trailers that hold toxics.	Conduct Training			David B.	7/21/10		
Node 3	Add additional bunkers for toxic storage	Add bunkers			Roy Y.	3Q 2010		
Node 4	Ensure fire drills are being conducted.	Check last fire drill			Roy Y.	5/25/10		

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ACTION ITEM SUMMARY / Facility Siting Review

#	Finding	Recommendation	Priority	Target Date	Responsibility	Completion Date	Initials	Corrective Action/Comment
1.5	Qty of acetylene cylinders allowed in requal room	SAFECOR to determine max number of cylinders allowed in room.	A		SAFECOR	1Q/08		
1.7	Evaluate height of exhaust stack on new tractors		B		Roy Y. Mike M.	4Q/07		Height of stacks is not an issue
1.7	Review site security plan	Plan will be reviewed during HM-126 training safety meetings and security training	B		On-line Training program	08/09/10		
1.10	Evaluate installing barriers by overhead piping and EHS storage	Determined not needed but install in front of 1000 gallon propane tanks	B		Roy Y.	1Q/08		
1.12	Determine electrical classification	Locate old drawings	C		Roy Y. Mike M.	1Q/09		
	Train local managers		B		Peter C.	1Q/08		

	on MOC							
1.13	Evaluate emergency lighting		B		Safety Committee			

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ACTION ITEM SUMMARY / Human Factors

#	Finding	Recommendation	Priority	Target Date	Responsibility	Completion Date	Initials	Corrective Action/Comment
2.1	Install Pipe markers		C		Mike M.	3Q/09		
2.1	Change alarm type	Change sound to be whistle	A		Roy Y.	2Q 08		
2.1	Install glow in the dark signs		B		Mike m.			
2.2	Ensure local work instructions for processes emphasize need to not perform certain tasks on their own. valuate installing barriers by overhead piping and EHS storage		B		Roy y.	2Q 2010		
2.2	Ensure operators have non-sparking tools for all activities in Acetylene process area		B		Roy Y.	Year 08 Year 09 As needed		
2.3	Complete plant pipe labeling		B		Mike m.	2Q/2010		

2.4	Train Plant Management and Supervision on MOC and Energy isolation procedures		B		Peter C.	1Q/08		
2.5	Upgrade Emergency Shutdown equipment		B		Roy Y.			
2.7	Document Site Specific work instructions	Initial Start up procedures Normal Operations Daily openings Process Chemical Storage Restricted Products Direct Ship Returns Process MOC	B		David B. Roy Y.	Year 08, 09		

Attachment 4

Syracuse Acetylene Plant
(now Airgas East)
Syracuse, NY

Work Order – Acetylene Generator

Airgas East
121 Boxwood Lane,
Syracuse, New York, 13206-1802
United States
Phone : (315)463-1488
Fax :
E-Mail: don.guertin@airgas.com

Work Order

Report Date:14-Jul-2010

Customer:

:-

NO: E0006-00000207

Date: Never

Equipment Name : Generator
Internal Control No : SYR-Acetylene Generator NA-7
Mfr.Serial No : NA7-1T1
Location : Acetylene Dept.
Maintaince Profile :acetylene generator na7
Type of Maintaince: Yearly
Notes:
Exceptions:
Total Labor(hrs):0.000000
Labour Cost:0.000000
Assigned To:

Brand : Oxweld
Model : NA7
Capacity : 9000 cuft
Due Date : Never
Actual Date : 14-Jul-2010

Equipment :
Ref . Notes :
Material cost:0.000000
Equipment Down Time:0.000000

Material No.	Material Name	Qty.	Price.
There are no records to fetch			

Sequence No.	Operation	Operation Description
1	Generator Annual Inspection	(1)___ remove all safety valves, 16psi main, 15psi auxiliary, 20psi hydraulic, 20psi hopper equalizing and 20psi blow back. (2) ___remove crown sheet sprays and 3 scrubber sprays. (3) ___remove all pressure gauges, acetylene, water and air. (4) ___remove flowmeter sight glasses. (5)___check and clean water piping to sprays and flowmeters. (6)___remove,test and calibrate thermometer. (7)___clean all spray heads and piping. (8)___clean flowmeters and piping. (9)___check and set all safety valves (10) ___check and calibrate all pressure gauges. (11) ___remove,clean,repair,and reinstall water regulater. (12)___clean and repair automatic dump valve and piping. (13)___remove plug, clean and grease manual dump valve. (14)___clean and grease other plug valves in water system. (15)___remove bonnet and clean check valve on hydraulic. (16)___clean upper hpper equalizing lines and valves. (17)___Clean upper hopper vent lines and valves. (18)___remove and clean lower hopper equalizing line. (19)___check and repair agitator if needed. (20)___remove seat and clean pneumatic water control valve. (21) ___remove,disassemble,clean and reset Robertshaw @ 165 deg f. (22)___remove inspection plugs on gas outlet lines, inspect and clean lines. (23)___clean gauge glass and openings if used.
2	acetylene generator interior	(1)___ remove, clean and grease ball float and arm. (2)_____ clean out recess to liquid level controller. (3)_____ scrape down internal surfaces and scrubber tower. (4)_____ inspect and clean behind baffle over automatic dump valve. (5)_____ clean gauge and mercroid openings. (6)_____ clean temp. control and high temp. shut down probes. (7)_____ clean carbide feed screw outlet. (8)

		____ check upper feed screw bearing for wear. (9)____ check to be sure bearing is getting grease. (10)____ check high and low shut down positions and lights and alarms. (11) grease interior.
3	hoppers and components	(1)___remove inspection covers. (2)___inspect and clean interiors and equalizing lines. (3)___remove plug,clean,grease and replace upper plug valve. (4)___remove plug, clean,grease and replace lower plug valve. (5)___replace inspection covers on both hoppers. (6)___change oil in gear reducer boxes
4	after cleaning and with generator in operation	(1)___check high water level red lights and feed screw shut down. (2)___check time delay (2-3 min) shut off on pneumatic water valve and agitator. (3)___ check low water level white light for correct setting. (4)___ check low water level red light and feed screw shut down. (5)___ check high temp. red light and shut down at 190 deg f.

Part No.	Part Description	Qty.	Serial No.	Replace.
There are no records to fetch				

Other Item	Qty.	Cost
There are no records to fetch		